

Appendix 2: Arsenic Detection Technology Summary

Manufacturer	Product Name	Technology	Indicator	Cost	Known Users	Accuracy (ppb)	Detection Time	Market Presence
LUMIN (Licensor)	Arsenic Biosensor	Biosensor	Two colours	RRP \$2 / test	-	As Required (10ppb baseline, multiple ranges)	24hrs	-
Hach Company (US)	Arsenic test kit ²	Test strip	Graduated colour	\$1.06/test 100 @ \$106 ³	UNICEF	10-500	40 min	Cambodia, India (West Bengal), Bangladesh
Industrial Test Systems (US)	Arsenic Quick ⁴	Test strip	Graduated colour	\$1.7/test 100 @ \$170	US utilities	5-100, >250	12 min	N/A
Industrial Test Systems (US)	Arsenic Quick II ⁵	Test strip	Graduated colour	\$2.2/test 50 @ \$220	US utilities	<1-160	14 min	
LaMotte Company (US)	Arsenic Test ⁶	Test strip	Graduated colour	\$3.06/test 50 @ \$153	US utilities	2-160	10 min	N/A
Merck (Germany)	Merckoquant ⁷ , Arsenic, sensitive	Test strip	Graduated colour	\$0.7/test 100 @ \$70 ⁸	UNICEF	10-500	32 min	Laos, Vietnam, Cambodia
Merck (Germany)	Merckoquant ⁹ , (highly sensitive) ⁹	Test strip	Graduated colour	N/A	UNICEF	0-500	N/A	
Merck (Germany)	Nova 60A	Portable digital detector	Digital reading	N/A	UNICEF	1-100	N/A	
TraceDetect (US)	Explorer	Arsenic capture via micro-electrodes	Digital & software analysis package	\$2.5/test \$12,500 ¹⁰ @ 5,000	USA	Continuous reading	45 min	N/A
Wagtech Int'l ¹¹ (UK)	Digital Arsenator ¹²	Digital photometer	Digital reading	\$2,000	UNICEF ¹³ , WHO WATSAN	2-100	20 min	Bangladesh, Myanmar, Laos
Wagtech Int'l (UK)	Visual Colour Detection Kit ¹⁴	Test strip	Graduated colour	N/A	UNICEF	100-500	N/A	
Wagtech Int'l (UK)	Metalyser HM1000	Hand held digital detector	Digital reading	N/A	N/A	1-240	>5 min	
DOEH, NIPSOM ¹⁵	NIPSOM Field Test Kit	Test strip	Colour indicator	"low cost"	WHO/World Bank "recognised"	Qual. field test. <10	N/A	N/A
Acustrip (US)	Arsenic Check	Test strip	Graduated colour	N/A	UNICEF	5-500	12 min	N/A
Acustrip (US)	Low Range Arsenic Check	Test strip	Graduated colour	N/A	UNICEF	2-160	12 min	
Acustrip (US)	Econ Quick Check	Test strip	Graduated colour	N/A	UNICEF	10-1000	12 min	
Mahidol University (Thai)	N/A	N/A	N/A	N/A	UNICEF	5-500	N/A	Thailand
Peters Engineering (Austria)	PeCo 75	Test strip (optional Digital Photometer)	Grad. colour opt. digital reading	N/A	UNICEF	N/A	N/A	Bangladesh, Laos

² UNICEF Supply Code (<http://www.supply.unicef.dk/Catalogue/bulletin8.htm>) - 0005510 - Arsenic testing kit (powdered reagents)

³ 2003/4 data from Evaluation of arsenic field test kits for drinking water analysis, American Water Works Association, 2006

⁴ <http://www.sensafe.com/481396.php>

⁵ <http://www.sensafe.com/481303.php>

⁶ <http://www.lamotte.com/pages/common/newprod/4053.html>

⁷ UNICEF Supply Code (<http://www.supply.unicef.dk/Catalogue/bulletin8.htm>) - 0005500 - Arsenic testing kit (liquid reagents)

⁸ 2003/4 data from Evaluation of arsenic field test kits for drinking water analysis, American Water Works Association, 2006

⁹ UNICEF Supply Code (<http://www.supply.unicef.dk/Catalogue/bulletin8.htm>) - 0005520 - Arsenic test kit, highly sensitive

¹⁰ 2003/4 data from Evaluation of arsenic field test kits for drinking water analysis, American Water Works Association, 2006

¹¹ www.wagtech.co.uk

¹² UNICEF Supply Code (<http://www.supply.unicef.dk/Catalogue/bulletin8.htm>) - 0005523 - Digital Arsenator

¹³ <http://www.irinnews.org/Report.aspx?ReportId=79160>

¹⁴ UNICEF Supply Code (<http://www.supply.unicef.dk/Catalogue/bulletin8.htm>) - 0005522 - Visual Arsenic Detection Kit, 200

¹⁵ Department of Occupational and Environmental Health (DOEH), National Institute of Preventive and Social Medicine (NIPSOM) in Dhakar, Bangladesh
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